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PD - 2001-01-26 OPD - 1999-07-06

PR - JP19990191933 19990706

TI - FEED MECHANISM OF OPTICAL PICKUP

IN - TERAJIMA TAKAO

PA - RICOH KK

IC - G11B21/02; G11B7/085

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TI - Optical pick-up drive mechanism for optical disk drive, includes visco-elastic transmission components providing buffer coupling of driven section and drive section

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PA - (RICO) RICOH KK IC - G11B7/085 ;G11B21/02

AB - JP2001023321 NOVELTY - The driven section comprises of housing (3) with objective lens (1) and objective lens actuator (2). The drive section includes a gear mechanism (8). Visco-elastic transmission components (10,11) provide buffer coupling of the housing with a gear mechanism.

USE - For moving optical pick-up in optical disk drive.

- ADVANTAGE - Due to visco-elastic transmittance, operation of housing becomes smooth though the sending resolution of drive section is coarse. Also slippage of housing is reduced.

- DESCRIPTION OF DRAWING(S) - The figure shows the top view of optical pick-up drive mechanism.

- Objective lens 1

Objective lens actuator 2

Housing 3

Gear mechanism 8

Visco-elastic transmission components 10,11

 $\cdot \qquad (Dwg.1/8)$

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IN - TERAJIMA TAKAO

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TI - FEED MECHANISM OF OPTICAL PICKUP

AB - PROBLEM TO BE SOLVED: To make deviation between an optical axis of a light pickup and an optical axis of an objective lens minute although feed resolution is coarse.

- SOLUTION: At least a housing 3 on which the objective lens 1 is mounted and which is supported freely movably in about straight line and a coarse feed mechanism 6 are buffering-joined via a viscoelastic transfer means 12. Since motion of a driving source is converted to a housing motion by the viscoelastic transfer means, the housing motion is smooth even when feed resolution of the driving source is coarse and thereby deviation between the housing and the objective lens driven by a fine adjustment means can be made to be minute.

I - G11B21/02 ;G11B7/085